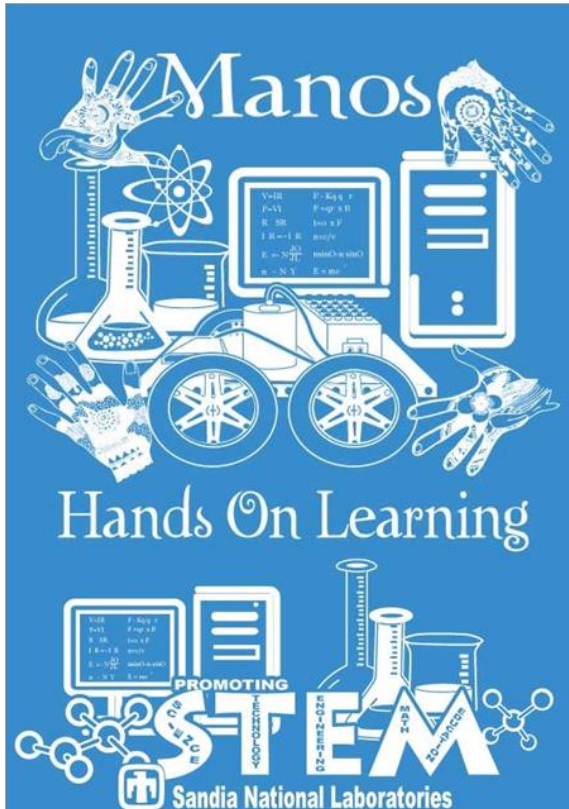


MANOS 2017-2018



**Sandia
National
Laboratories**



EMPOWER
ENGAGE
EDUCATE | Hispanic Outreach for
Leadership and Awareness

**National
Hispanic
Cultural
Center**

Location:

National Hispanic Cultural Center
Pete V. Domenici Education Building
(Creative Classroom)
1701 4th Street SW

Dates: Thursdays, 10/19/17 – 5/3/18

Times: 4 PM to 6 PM

Check out our Website!

<https://share.sandia.gov/stem/manos/index.html>

What is Manos?

Manos Hands-on Science and Engineering Program is an educational supplement targeting Hispanic middle school students. The Program is sponsored by Sandia National Laboratories' Hispanic Outreach for Leadership and Awareness, Diversity, Community Involvement, EEO & AA, Albuquerque Public Schools and the National Hispanic Cultural Center (NHCC).

This program is designed to introduce Science, Technology, Engineering, and Math (STEM) concepts to middle school students and spark their interest in pursuing careers in those fields. This program is offered each school year for students in grades 6th - 8th. Students and parents are encouraged to participate and volunteer.

What is the purpose of the Manos Program?

- Develop awareness and pride in accomplishments of Hispanic professionals and inventors.
- Increase the pool of Hispanic students who pursue degrees in STEM.
- Support the development of a scientific and technically trained student-base with hands-on technology experiences.

Workshops:

Manos provides students the opportunity for early high-tech business involvement with local communities. Young minds are inspired through engineering and scientific experiences. The focus is to increase and promote student academic excellence at the pre-college level. Manos nurtures "hands-on" science, technology, engineering and math experiences primarily for Hispanic students, but the program is open to all students. Manos works to improve students' academic rate of success and personal self-esteem. The Manos Program continues to foster and expand awareness of self-respect for the contributions and achievements of Hispanic inventors and scientists.

Three Sessions will be offered throughout the school year. See reverse side of this sheet for details.

Who can participate?

All students in grades 6th through 8th are eligible to participate. Enrollment is on a first come first served basis. There is no cost to the student for attending the program. **Bussing is provided from the target school only** (see reverse for schedule). All other transportation, including pick-up at class dismissal is not provided.

MANOS 2017-2018

Register Online: <https://nhccnm.wufoo.com/forms/manos/>

Location: All Manos Sessions are held at the National Hispanic Cultural Center (NHCC), Pete V. Domenici Education Building

*Students are transported via bus from the target school, for session dates indicated, free of charge, and MUST be picked up at the NHCC by class dismissal promptly at 6:00 p.m.

Session Dates	Session Name	Session Description	Target School <i>*Bus service provided</i>	Registration Period:
Fall Break 10/12/17 - 10/13/17				
Session 1 - Part 1 Thursdays, 4-6pm 10/19/17 - 11/16/17 (5 weeks)	Fun with Math and Money	Can you guess how many Red M&Ms are in a jar? Do you know what PI is? Do you know how to make your money “grow”? This class uses fun games to help you answer these questions and more.	Ernie Pyle	10/12 - 10/19
	Electronics	What is a component? What is integrated circuitry and how does it work? What makes a computer work? Who is <i>Ohm</i> and what is it? How is the flow of electricity controlled?	South Valley Prep	
Thanksgiving Break 11/22/17 - 11/24/17				
Session 1 - Part 2 Thursdays, 4-6pm 11/30/17 - 12/7/17 (2 weeks)	Fun with Math and Money	Can you guess how many Red M&Ms are in a jar? Do you know what PI is? Do you know how to make your money “grow”? This class uses fun games to help you answer these questions and more.	Ernie Pyle	10/12 - 10/19
	Electronics	What is a component? What is integrated circuitry and how does it work? What makes a computer work? Who is <i>Ohm</i> and what is it? How is the flow of electricity controlled?	South Valley Prep	
Winter Break 12/18/17 - 1/1/18				
Session 2 Thursdays, 4-6pm 1/18/18 - 2/22/18 (6 weeks)	Intro to Engineering	Are you creative, curious, like to build things or just take things apart and see how they work? Then engineering is for you!!! Like to build cards, try mechanical engineering. Like to build bridges, civil engineering is the place. In each class, you will become a different type of engineer, learn about them, how to become a “real” one and work on a fun activity.	Polk	12/7 - 1/18
	Robotics	Students learn how to build and program robots and work with <i>LEGO MINDSTORM KITS</i> . Students will learn how to make a robot follow a line, how to use touch and light sensors. The students will learn about career pathways in high wage, high technology fields. They will also learn about the importance of teamwork in a competitive environment.	Jefferson	
	ChemisTRY	Chemistry makes up every part of our lives. Students will learn how chemistry plays a big role in the world, from tiny particles in sunblock to planets in the universe. Hands on projects will expose students to the amazing science we call chemistry!	Harrison	
Parent/Teacher Conferences 3/1/18 - No Manos this week				
Session 3 - Part 1 Thursdays, 4-6pm 3/15/18 - 3/22/18 (2 weeks)	Computer Discovery	Is your smartphone a computer? Did you know there are multiple computers in cars? Software and hardware is everywhere from Facebook to toothbrushes. Come learn about how software and hardware impacts your everyday life and how you can design your own!	Truman	2/22 - 3/15
	Physics	How does a rocket fly? Why does the light turn on when I flip a switch? How does a rollercoaster work? Can I drop an egg and not break it? Learn the answers to these questions and more by conducting experiments in force, mass, energy, friction, momentum, aerodynamics, heat and magnetism.	Washington	
Spring Break 3/26/18 - 3/30/18				
Session 3 - Part 2 Thursdays, 4-6pm 4/5/18 - 5/3/18 (5 weeks)	Computer Discovery	Is your smartphone a computer? Did you know there are multiple computers in cars? Software and hardware is everywhere from Facebook to toothbrushes. Come learn about how software and hardware impacts your everyday life and how you can design your own!	Truman	2/22 - 3/15
	Physics	How does a rocket fly? Why does the light turn on when I flip a switch? How does a rollercoaster work? Can I drop an egg and not break it? Learn the answers to these questions and more by conducting experiments in force, mass, energy, friction, momentum, aerodynamics, heat and magnetism.	Washington	

Register Online: <https://nhccnm.wufoo.com/forms/manos/>

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